Empowered by Innovation NEC

MULTEOS

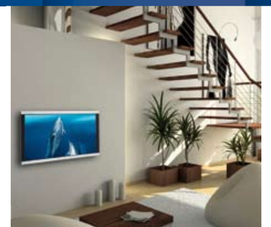
WITH NEC'S MULTEOS SERIES,

Design by Naoto Fukasawa
Designer of the MULTEOS product line and winner of over 50 design awards, among them the American IDEA Gold Award, the German iF design award, the British D&AD Award, the Mainichi Design Award as well as the Japan Good Design Gold Prize.

Vitae of Naoto Fukasawa
Naoto Fukasawa was born in Yamanashi Prefecture, Japan, in 1956. In 1980 he received his degree in product design from the Tama Art University and subsequently was a designer for Seiko Epson Corp. until 1988. From 1989 until 1996 he worked for the design company IDEO in San Francisco and then built IDEO's branch in Tokyo, which he ran as president. In 2003 he founded Naoto Fukasawa Design. Currently Fukasawa is a lecturer at the Tama Art University as well as director of the AAD Studio in Tokyo and a member both of the Advisory Board for Quality Design and the Society for the Research of Strategic Design of the Ministry of Business, Trade and Industry.

"The design of an object corresponds to our unconscious movements and the environment that surrounds us. When you see something for the first time, it seems to be important. But it's the later, when you use the object, that you realise that what you've missed initially is the essence of what design is all about."

MULTEOS



THE FUTURE OF LCD FUNCTIONALITY HAS ARRIVED.

Design statement, entertainer, sales professional – the MULTEOS reflects a new age in visual communication. Designed and engineered to conquer the most demanding installation challenges, it is an iron fist in a stylish, alloy glove.

It provides a strong presence for leading brands in flagship designer stores and shopping centres. A fashionable focal point in up-market bars, restaurants, hotel lobbies and fitness studios and is an image carrier in conference rooms and control centres of international business.

MULTEOS fascinates in the most diverse environments – as a stand-alone solution on an elegant aluminum stand, wall mounted or in multi-display installations, it does the hard yards day in, day out while remaining stylish, cool and efficient.

Of course MULTEOS is just as comfortable in the home theatre environment and is demanded by those enthusiasts who expect the highest quality visual performance, bullet proof reliability and future proof connectivity.

COMPREHENSIVE BUT EASY-TO-USE FULL REMOTE CONTROL

STYLING, VISION AND ENGINEERING COME INTO PERFECT FOCUS

NEC's MULTEOUS multifunction displays set new benchmarks in flexibility and performance, but perhaps their greatest achievement is that they do it so beautifully. The crisp, full high definition screen and full metal chassis is framed in a taut combination of matt black and polished aluminum. This creates a perfect compliment to any architecture, whether domestic or commercial.

Flexible

MULTEOS displays can be perfectly integrated. They can be the freestanding centre of attention sitting on an elegant, easily detachable stand or part of the interior architecture, wall mounted according to the VESA standard. Alternatively it can be combined with up to 24 (5x5) other MULTEOS displays in a video wall for maximum impact, the choice is yours.

Reliable

The overheating protection, specially developed for professional use, guarantees a long product life even in extreme environments. A heat/temperature sensor checks the temperature regularly and when necessary, cools the product down to the individually defined optimum temperature with two powerful fans.

Additional mechanisms, such as automatic reduction of brightness in extreme temperatures, ensure uninterrupted operation, guaranteeing the reliability of the MULTEOS line.

Unrivaled security

Designer pieces such as the MULTEOS displays can trigger strong desires, sometimes unwanted. Therefore MULTEOS displays are equipped with coded theft protection. Once activated, the displays can only be reactivated by entering the password locked in before power was disconnected.

User-friendly

With its elegant silver design and comprehensive functionality, the MULTEOS remote control is striking. All connections and the most important functions can be controlled at the simple push of a button. It features intuitive navigation with a new onscreen menu: all main categories are represented by easily recognisable menu icons.

Consistent colours

Colour temperatures have great significance – for instance in broadcasting with its strictly defined background pictures. The colour temperature of the MULTEOS displays can be set to between 2,600 and 10,000K in 100K increments.

Full HD resolution

For HDTV, HD DVDs/Blue-ray Disc and digital signage data that is rich in details. Full HD offers up to 97% more room compared to a pixel resolution of 1366 x 786. HD truly shows it's worth in sales promotion applications such as digital menu cards, product offers, promotional spots etc. as well as map display or applications in broadcasting.

Interface

This interface in concert with HDCP (High Digital Content Protection) is indispensable for the reception of encrypted signals and enables better reception and decoding of high resolution encoded signals.

MULTEOS displays are extremely contact friendly both to the viewer and technically with connections to numerous video and PC sources:

- 1080 native
- Component, composite, S-video inputs
- SCART signal compatible
- Option slot for CAT5 receiver, HD SDI or SBC (integrated PC)
- HDMI + DVI-D + RGB

Independent

Advanced Cable Comp provides spatial freedom. CableComp technology has been developed by NEC in close cooperation with project clients and is the only system of its kind on the display market. Long cables significantly impair picture quality. Among the reasons for this are the long signal propagation times (for instance, the RGB signals for a white pixel arrive consecutively rather than simultaneously, leading to visible colour shifts on the image,

making it appear blurred. CableComp technology automatically compensates for this signal attenuation and colour shift. It can compensate for cable lengths of up to 100m for analogue signals and 30m for digital signals without the need for any additional hardware.

Teamwork capable

Thanks to TileMatrix, up to 5 x 5 multifunctional monitors can be installed with standard commercial graphic cards as a video wall. Here TileComp simulates a frameless display wall without annoying transitions. Series-connected, MULTEOS displays accompany the viewer through shopping centres or along trade fair stands.

Absolutely reliable

Trade fair stands often have a distinct style. And weak power circuits as well. This poses no problem with Power on Delay. Applications with heavy power consumption are safe due to the time-delayed start of the individual MULTEOS displays.

Efficient

Depending on the input, the integrated scheduler function handles the turning on and off of the displays. This increases efficiency of use and product life.

Bled off

Free choice of colours for the margin areas in unmodified 4:3 applications. Selecting low contrast is ideal for optimum content design for static pictures and extends the product life of the display.

Environmental

MULTEOUS has been designed with impressive green credentials. It is RoHS (Restriction on Hazardous Substances) compliant, containing fully disposable plastics and minimal amounts of hazardous materials, such as lead, hex-chrome, cadmium, mercury, PBDE and PBB.

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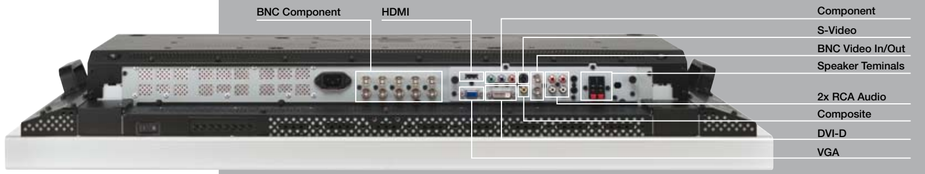
THE NEW NEC MULTEOS M40 AND M46 INCLUDE THE FOLLOWING FEATURES:

- **FULL HIGH DEFINITION RESOLUTION** OF 1920 X 1080 FOR CLEAR, REALISTIC IMAGES
- **HDMI – HIGH DEFINITION MULTIMEDIA INTERFACE** – ALL DIGITAL AUDIO/VISUAL INTERFACE TRANSMITS UNCOMPRESSED STREAMS.
- **HDCP – HIGH DIGITAL CONTENT PROTECTION** – CAN BE USED WITH FUTURE HI-DEF COMPONENTS.
- **NEC'S EXCLUSIVE DIGITAL SIGNAGE TECHNOLOGY SUITE (DSTS)** – MORE THAN 20 FEATURES ANDz FUNCTIONS DEVELOPED SPECIFICALLY FOR DIGITAL SIGNAGE.
- **SELECTIVE GAMMA CURVES** – AUTO ADJUST COLOR SCHEME FOR EVEN-LOOKING, TRUE-COLOR PICTURES WITH MULTIPLE GAMMA CURVES DESIGNED SPECIFICALLY FOR DIFFERENT APPLICATIONS.
- **OSM LOCKOUT** – GIVES USERS ABILITY TO LOCK OUT ALL FUNCTIONS, INCLUDING POWER, LIMITING NON-USERS FROM ADJUSTING PRESET ADJUSTMENTS.
- **PROPRIETARY IR (INFRARED) CODES** – PREVENT UNAUTHORIZED REMOTES FROM CONTROLLING THE MONITOR.
- **TILEMATRIX™ AND TILECOMP™ CAPABILITY** – CREATES REALISTIC VIDEO WALLS UP TO 25 DISPLAYS (5 X 5 MAXIMUM).
- **ENHANCED ACCUCOLOR 6-WAY COLOR CONTROL** FOR IMPROVED COLOR MATCHING.
- **10-BIT FAROUDJA DCDI CHIP** FOR A CRISP AND TRUE PICTURE.
- **UNIQUE THERMOSTATIC COOLING FEATURES** TO ENSURE LONG LIFE AND GUARANTEE EXCEPTIONAL DURABILITY.
- **COLOR CALIBRATION CAPABILITY** – COMPATIBLE WITH NEC'S EXCLUSIVE SPECTRAVIEW II.
- **GAMMACOMP** - ALLOWS FOR PRESET OR CUSTOMIZED GAMMA CURVES TO BE DISPLAYED.
- **GAMMACOMP MD SUPPORTED** – DICOM COMPLIANT FOR MEDICAL APPLICATIONS.
- **OPTIONAL ATTACHABLE SPEAKERS.**



HANDLES ALL THAT THE COMMERCIAL WORLD CAN DISH UP WITH STYLE AND CONFIDENCE.

Steel chassis, aluminum surrounds, true High Definition resolution, state of the art styling, the MULTEOS has been designed and built to significantly raise the bar in LCD displays and meet the most demanding of commercial applications. This is because NEC knows no matter where it is displayed, your message needs to make a direct impact. With the NEC MULTEOS your messaging will benefit from the latest technologies and stop people in their tracks.

Why a public display such as the MULTEOS rather than a consumer LCD or Plasma Television

Business environments require professionalism. Long operating hours and adverse operating conditions can turn service staff members into familiar faces in case of normal consumer televisions. The MULTEOS line has durable, superior components which, combined with a sophisticated concept, offer unmatched long product life and reliability.

MULTEOS displays set standards for infotainment displays of the future.

The benefits compared to consumer televisions:

Sturdy construction and durable componentsUser-definable, 3-step overheating protection

- Integrated fans which start operating only when needed
- Protective glass (optional)
- VESA mounting
- Detachable loudspeakers (optional)
- Option slot for single-board computer, HD SDI, CAT 5 receiver etc.
- Landscape and portrait mode
- Long cable management (digital and analogue)
- Doubled product life (compared to consumer LCDs and Plasma TVs)

When it comes to running a business the last thing you need to be doing is running around fixing or updating your digital displays. Invest in piece of mind and invest in the future with the stylish practicality of NEC's MULTEOS range.

NOT EVERYONE DEMANDS SO MUCH FROM THEIR HOME THEATRE DISPLAY.

There is a certain satisfaction in having a no compromise attitude to everything you do. There should be no compromise on performance just as there should be no compromise on aesthetics. Great design is not an option, it is a given.

MULTEOS was created to last, even under the harshest conditions. While others quote the life of their screens, few will talk about the other components that power that screen. It is a little known fact that most home theatre monitors' components will fail long before the screen ceases to deliver. Strange then that of all the brands on the market, NEC is one of the few that offers it's own network of highly trained technicians for in-home servicing.

MULTEOS has been designed from the ground up to establish a new premium standard in the home media/theater, digital signage and AV markets, it offers professional-grade, high-quality components, network capable connectivity and an unparalleled feature set to create a new, unrivalled user experience.

The MULTEOS LCD Series currently features the 46-inch, M46 and the 40-inch, M40. Unlike most consumer-grade LCD TVs, the MULTEOS M40 and M46 utilize an all-metal chassis and a proprietary ASIC chip set for superb video and crisp, clear graphics that won't distort during image scaling. Both displays offer full HD 1080p resolution at 1920 x 1080 and a 16:9 aspect ratio, for superior display-quality text and graphics performance.

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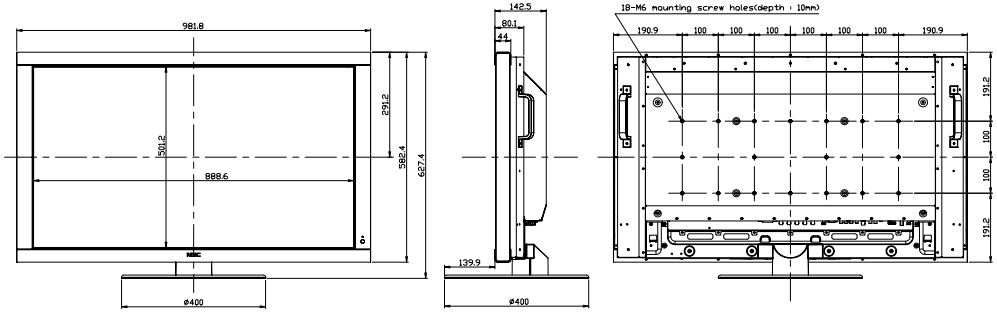
MODEL	MULTEOS M40
DISPLAY	
Viewable Size Image	40"
Pixel Pitch	0.461mm
Pixels Per Inch	55 @ native resolution
Brightness	450cd/m2 adjustable
Contrast Ratio	1000:1
Viewing Angle	178 Vert., 178 Hor. (89U/89D/89L/89R) @ CR>10
Response Time	Rapid Response (8ms)
Display Colors	256 RGB Level, more than 16.7 million
Color Control	Manual (2600 - 10,000 degrees K)
Active Screen Area (WxH)	34.9 x 19.6 in. / 885.6 x 498.2mm
Screen Aspect Ratio	16:9
Bezel Width (T, B, L, R)	1.6, 1.6, 1.8, 1.8 in. / 40.6, 40.6, 46.6, 46.6mm
SYNCHRONIZATION RANGE	
Horizontal	31.5-91.1 KHz (Analog/Digital)
Verticle	50-85 Hz (Analog/Digital)
INPUT SIGNAL	
Video	ANALOG RGB 0.7 Vp-p/75 Ohms
Sync	Separate sync: TTL Level (Positive/Negative) Composite sync: TTL Level (Positive/Negative) Composite sync on green: (0.3Vp-p negative, 0.7Vp-p positive)
OUTPUTS	Daisychain RGB2, RGB3, Daisychain Video1, Daisychain - SelectedAudio in, RS232 for multiple monitor control,15W x 15W
RESOLUTIONS SUPPORTED	640 x 400 @ 56.2 Hz 720 x 400 @ 70-85Hz 640 x 480 @ 50-85 Hz 800 x 600 @ 50-85 Hz 832 x 624 @ 74.5 Hz 1024 x 768 @ 50-85 Hz 1280 x 1024 @ 50-85 Hz 1600 x 1200 @ 60 Hz 1280 x 768 @ 50-85 Hz 1360 x 768 @ 50-85 Hz 1920 x 1080 @ 60 Hz NTSC/PAL,SECAM,4.43NTSC,Pal60 HDTV, 480i, 480p, 720p, 1080i, 1080p

NATIVE RESOLUTION	1920 x 1080 @ 60 Hz
RECOMMENDED RESOLUTION	1920 x 1080 @ 60 Hz
LANGUAGES	English, German, Spanish, French, Italian, Swedish, Japanese.
ADDITIONAL FEATURES	Power management, Plug and Play (DDC/CI, DDC2B), PIP (remote), multilevel zoom, FullScan, 6-axis color, CableComp, TileMatrix, TileComp, screen saver, Rapid Response,video ready (tuner available), infrared remote control included, motion-adaptive 3D-Y/C comb filter, sRGB color,sleep timer, 24x7 scheduler
TOUCH-CAPABLE	Designed for integration
VOLTAGE RATING	AC 100-120V / AC 220-240V @ 50/60 Hz
POWER SUPPLY	Internal
POWER CONSUMPTION (typical)	
On	300W
Power Savings Mode	<5W
DIMENSIONS (WxHxD)	
Net (with stand)	38.7 x 24.7 x 15.7in. /981.8 x 627.4 x 400mm
Net (without stand)	38.7 x 22.9 x 5.6 in./981.8 x 582.4 x 142.5 mm
NET WEIGHT (WITH STAND)	71.9 lbs.
VESA Hole Configuration Specifications	200 x 200mm (8 hole) / 200 x 100mm (6 hole)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	5-40 C/41-104 F
Operating Humidity	10-80%
Operating Altitude	4200m/13,780 ft. TBD
Storage Temperature	-20-60 C/-4-140 F
Storage Humidity	10-90%
Storage Altitude	12,000m/39,370 ft.TBD
REGULATORY APPROVALS	UL 60950/CSA C22.2 No. 950/TUV-GS/EN60950/ FCC-B/DOC-B/EN55022-B/EN55024/EN61000-3-2/EN1000-3-3/CE
INCLUDED ACCESSORIES	AC power cord,user manual, wireless remote control, batteries, 15-pin RGB cable, CD-ROM
OPTIONAL ACCESSORIES	External speakers, tilting wall mount
LIMITED WARRANTY	1 year parts and labor, including backlight
TECHNICAL SUPPORT	9am-5pm Mon - Fri

DIMENSIONS



MODEL	MULTEOS M46
DISPLAY	
Viewable Size Image	46"
Pixel Pitch	0.53mm
Pixels Per Inch	47 @ native resolution
Brightness	450cd/m2 adjustable
Contrast Ratio	1200:1
Viewing Angle	178 Vert., 178 Hor. (89U/89D/89L/89R) @ CR>10
Response Time	Rapid Response (8ms)
Display Colors	256 RGB Level, more than 16.7 million
Color Control	Manual (2600 - 10,000 degrees K)
Active Screen Area (WxH)	40.1 x 22.5 in. / 1018.1 x 572.7mm
Screen Aspect Ratio	16:9
Bezel Width (T, B, L, R)	1.6, 1.6, 1.8, 1.8 in. / 40.6, 40.6, 46.6, 46.6mm
SYNCHRONIZATION RANGE	
Horizontal	31.5-91.1 KHz (Analog/Digital)
Verticle	50-85 Hz (Analog/Digital)
INPUT SIGNAL	
Video	ANALOG RGB 0.7 Vp-p/75 Ohms
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TOUCH-CAPABLE	Designed for integration
VOLTAGE RATING	AC 100-120V / AC 220-240V @ 50/60 Hz
POWER SUPPLY	Internal
POWER CONSUMPTION (typical)	
On	340W
Power Savings Mode	<5W
DIMENSIONS (WxHxD)	
Net (with stand)	43.8 x 27.7 x 15.7 in. / 1112.8 x 704.4 x 400mm
Net (without stand)	43.8 x 26 x 5.6in. / 1112.8 x 659.4 x 142.5mm
NET WEIGHT (WITH STAND)	86.6 lbs.
VESA Hole Configuration Specifications	200 x 200mm (8 hole) / 200 x 100mm (6 hole)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	5-40 C/41-104 F
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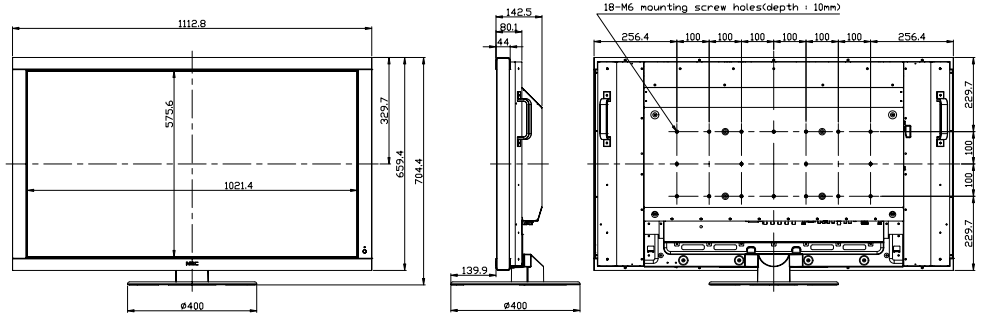

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